Administration (CNA), and Usage Extract Feed.

40. Bill Plus ™ is essentially a paper bill in electronic format. It enables CLECs to receive their monthly bill on a diskette or to download bills to their computer systems by modem today (or CD ROM by 2nd quarter 1997). With Bill Plus ™, CLECs can search for information on the bill, generate standardized or customized reports using any data that appears on the bill, or print any portion of the bill. Currently, over 650 SWBT retail business customers (25,000 accounts) are receiving their bills via this electronic mode.

41. EDI provides an industry standardized electronic interface which enables CLECs to receive data in an electronic format from SWBT's Customer Record Information System ("CRIS") database, the same information that would appear on their paper bill for resold services. EDI enables CLECs to manipulate billing data, generate reports involving billing data, track intraLATA long distance calls, and export data to their internal systems. Currently, over thirty five SWBT retail business customers (over 30,000 accounts) are receiving their bills via this electronic mode.

42. SWBT makes available to CLECs today an EDI interface to receive data in an electronic format from its Carrier Access Billing System ("CABS") database, the same information that would appear on its paper bill for unbundled network elements.

43. SWBT also makes available to CLECs today on-line access to CNA in order to obtain the same billing information for both resold services and unbundled network elements that would appear on its paper bill. With access to CNA, CLECs can perform a variety of activities. They can pull up billing information on all of their accounts, view current and prior (3 months back for CRIS and 11 months back for CABS) bills, create bill summaries, generate reports, and cross reference working and billing telephone numbers. CNA for billing will be migrated to the SWBT Toolbar in third quarter 1997.

44. Usage Extract Feed will provide CLECs electronically, on a daily basis, with information on the usage billed to its accounts in the industry standardized Exchange Message Record (EMR) format. This is a new capability implemented by SWBT that became available for CLEC use in December 1996. Several CLECs have been provided information regarding this service and one large CLEC has successfully received two test files. The Usage Extract Feed required over 5,000 hours work to complete design, testing and coding. CLECs will have to perform coding changes to receive this usage data into their billing system, so that they can rate and bill their end user customers.

OSS FUNCTIONS SUMMARY

45. To date, no CLECs are using, on a "live" basis, any of the electronic interfaces SWBT makes available for pre-ordering, ordering/provisioning, maintenance/repair, and billing. However, AT&T is accessing our EASE system while developing their internal training material and their methods and procedures for their service representatives. In addition,

several CLECs have signed contracts that are pending state commissions approval to utilize our electronic interfaces. In an effort to stimulate CLEC interest in SWBT's electronic interfaces, SWBT has provided demonstrations of its electronic interfaces (e.g.; EASE, Trouble Administration, etc.) to several CLECs, including AT&T, MCI and Sprint. A listing of the completed demonstrations to date is provided as Attachment C. In addition, SWBT has begun offering a one-time, 90-day free access period to its OSS functions. The free access period begins when access is established to any function in a live mode. SWBT also offers a free 90-day evaluation period whereby SWBT software applications (e.g., EASE, etc.) and existing testing databases are made available, as applicable. The free access period does not apply to tariffed OSS functionality (e.g., Bill Plus).

46. SWBT offers formal training sessions for CLECs who elect to interface with SWBT electronically. Depending on the chosen application (s), the training is either a requirement or optional to the CLEC. Training is required for applications that impact SWBT's network (e.g.; EASE and on the Trouble Administration application under the SWBT Toolbar). These sessions are instructor-led and will include "take-home" documentation with the intention that attendees will in turn train others within their own company. A nominal fee will be charged for all formal training sessions. Attachment D lists the CLECs that have already taken advantage of such training sessions and those that are scheduled to attend over the next few months.

NATIONAL STANDARDS DEVELOPMENT AND INTERIM ARRANGEMENTS

47. Prior to February 8, 1996, incumbent local exchange carriers, like SWBT, were not required on a total company basis to resell their local exchange services nor to unbundle their networks. Consequently, there were no national standardized electronic interfaces for access to SWBT's OSS functions. Nonetheless, SWBT has been active in standards setting organizations and supports the development of national standards for electronic interfaces with its OSS functions. For example, SWBT has expended considerable resources to define requirements and to develop an EDI gateway for ordering that conforms to national standards. SWBT has more than 12 representatives working on national standards development specifically related to Local Service Request (LSR) order formats and EDI data formats at the OBF/TCIF committees. In addition, SWBT has 9 employees working on the requirements for SWBT's systems that will process the LSRs received from the CLECs and at least 24 more employees are responsible for the design/development of this work. As a result of this commitment, SWBT has an EDI gateway in place that is capable of processing numerous types of orders for both resold services and unbundled network elements. As noted above, SWBT has promptly implemented national standards for electronic interfaces within its OSS functions as they have been developed, and has agreed to implement new national standards within 120 days of their release.

48. Like many CLECs, SWBT does not plan to support multiple versions of the same interface. However, while industry standardized interfaces are under development for many OSS functions, SWBT has attempted to accommodate the needs of CLECs by negotiating the implementation of interim arrangements for a variety of electronic interfaces. For example, SWBT has been working jointly with AT&T to define additional ordering requirements for the EDI interface even beyond what has been addressed within the national standards setting process. The important thing to remember is that implementation of these interim arrangements is complicated and requires cooperation between SWBT and the CLECs. It frequently requires extensive mapping between SWBT and the CLECs, and agreement as to the timing of movement from interim arrangements to emerging industry standards.

SYSTEM CAPACITY

49. Many CLECs have expressed concerns about the ability of the incumbent local exchange carriers' electronic interfaces and OSS functions to handle their requirements. In connection with its negotiation of interconnection agreements with several of the larger CLECs, SWBT orally requested forecasts of expected transaction/order volumes, and of the electronic interfaces they expected to utilize. No CLEC provided any forecast information with which SWBT could accurately develop and plan for increases in OSS capacity. Consequently, SWBT recently sent written detailed requests for forecast information to each CLEC which it has negotiated or arbitrated interconnection agreements. Attachment E is a sample copy of the letter requesting forecast information

that was sent to the CLECs. SWBT specifically requested written estimates of the quantity of interconnection, resold services, and unbundled network elements that each of these CLECs expects to order in 1997 through 1999, and the electronic interfaces they will utilize. In order to assist them in supplying the requested information, SWBT provided each of these CLECs with several charts detailing the kind of information that would be useful on both a quarterly and annual basis by state. As of April 9, 1997, only one small CLEC had responded to SWBT's written requests for this forecast information, with which SWBT can ensure that its OSS capacity is properly sized to meet the CLECs' expected demands. SWBT account managers will be placing follow-up calls to the CLECs beginning April 14, 1997 to determine when the forecasts will be provided. Nonetheless, SWBT is committed to providing sufficient processing capacity to meet the demand of CLECs using any of SWBT's electronic interfaces. As described in paragraphs 8 and 9, SWBT has made substantial investments to increase its OSS capacity in preparation for CLEC usage of SWBT's electronic interfaces. Most of SWBT's electronic interfaces and OSS functions are designed to be scaleable, since these applications utilize state of the art client/server technology. SWBT also has processes in place to monitor capacity needs. Additional hardware can easily be incorporated into the existing infrastructure to accommodate growth.

50. With respect to the electronic interfaces SWBT is making available to the CLECs, several were operational and used for processing service orders for its retail residence, business, and interexchange carrier customers prior to the enactment of the Act. Therefore, SWBT

has experience with the capacity of these electronic interfaces and systems. Others are new and SWBT has performed tests to determine the scaleability of these electronic interfaces and systems. Since we are offering the CLECs some of the same front office systems we use ourselves and our back office systems will be processing CLEC requests alongside our own, we have just as much or perhaps even more at risk in making sure that we are able to handle the extra load from CLEC volumes. If we don't have sufficient capacity, the system response times for our own representatives and customers will be negatively impacted and our ability to turn cycles on our back office systems will be hampered. That is why the receipt of accurate forecasts from all CLECs is critical to SWBT so we can add CLEC estimates on top of our own capacity planning process to ensure that we have enough time to purchase and install any necessary hardware to meet our combined needs. In the following paragraphs, I will describe the capacity of SWBT's various electronic interfaces and OSS functions.

51. In lieu of forecasts from the CLECs, SWBT has increased its OSS capacity based upon its own estimates of initial CLEC activity. For example, SWBT's EDI gateway can handle up to 50,000 total transactions in an hour. A more relevant statistic would be the number of service orders that the interface can support. However, since SWBT's EDI gateway is new for CLEC ordering, accurate forecasts of CLEC volumes do not exist, and because variations in pricing of resold services and unbundled network elements will affect the market differently in every state, SWBT cannot accurately predict the system capacity of EDI. Nonetheless, SWBT built the EDI Gateway to support order requests for resold

services based on the receipt of 100,000 resale service requests per quarter and to support unbundled network elements based on the receipt of nearly 300,000 service requests during 1997, beginning with minimal orders forecasted during the first quarter with increases through 1997. Additional capacity above and beyond these numbers is available for CLEC orders processed by using SWBT's EASE interface as described in paragraph 53. Traditionally, SWBT augments its computer processors when they are expected to reach approximately 85% of operating capacity, based upon an analysis of actual usage and available forecasts. Modifications to mainframes that support multiple operating systems are made to support all system resources on an equivalent basis.

52. SWBT's RAF, which is required for electronic access to EASE, Verigate, DataGate, SWBT Toolbar and CNA, is currently designed to handle 96 simultaneous dial-up connections (analog and ISDN) plus 24 private line connections. Additional dial-up modems or private line connections can be added to the RAF. If volumes warrant, the RAF facility could be expanded to meet demand. SWBT will closely monitor the CLECs' use of its RAF during 1997 and will add a second facility if needed to double our existing capacity.

53. EASE currently processes an average of 65,000 service orders daily for SWBT retail customers, but has handled up to 91,000 service orders on a peak day. In 1996, SWBT processed 24.6 million service orders through its "back office" systems, or roughly 100,000 per workday. Of that volume, 12.8 million service orders were processed

through EASE. CLECs that utilize EASE will reuse embedded EASE capacity as SWBT customers are converted to CLEC accounts. This adds to the overall electronic interface capacity that SWBT makes available to CLECs.

54. Verigate became operational in the spring of 1996 and is being used today by a number of interexchange carriers to perform pre-ordering for special access requests. Verigate performed a total of 19,725 transactions in 1996, beginning with 1,725 in June and steadily increasing to 3,552 transactions in December.

55. DataGate has been used for some time by SWBT to retrieve data from other internal applications, and is currently processing an average of 350,000 transactions per day.

56. SWBT Toolbar enables SWBT's retail business customers and interexchange carriers to check the status of service orders and to submit and check the status of trouble reports. CNA enables CLECs to access billing information. In 1996, as an aggregate of order status, trouble administration, and billing inquiries, SWBT Toolbar and CNA processed almost 41,000 transactions. SWBT Toolbar software for checking the status of service orders and for trouble administration has no transaction limit. Any limitations will be determined by the CLEC's choice of dial-up or private line access to the Toolbar via SWBT's RAF. CNA software for billing inquiry has no limit to the total number of transactions per day. However, there is a limit to the number of concurrent users which is dependent on their access method. For dial-up CLECs, there is currently a 32 modem

terminating limit. Combining dial-up and direct access, the limit would be no more than 50 concurrent transactions. CNA for billing will be migrated to the SWBT Toolbar in third quarter 1997 and the capacity will then be based on SWBT's RAF, which will be closely monitored and is scaleable

57. EBI is in operation today for trouble administration of exchange access services and is being utilized by AT&T and MCI. In 1996, EBI processed over 24,000 trouble reports which amounted to approximately 288,000 transactions based on an average of 12 transactions per trouble report. EBI has been successfully "stress tested" in a prototype environment to allow the creation of 4,000 trouble reports per day. Although there is not a limit on the number of transactions EBI can handle, response times for back-office systems that EBI accesses could be affected by greatly increased transaction volumes. Therefore, transaction volume increases and any corresponding impact on response time will continue to be monitored by SWBT to determine when system capacity should be increased.

58. The Usage Data Extract Feed has no limit to the total number of transactions it can handle per day. A test file of over 400 messages has been successfully transmitted to a CLEC. Capacity planning for daily usage information has assumed the ability to store forty-five days of daily usage files for the specified number of lines.

CONCLUSION

59. SWBT meets the requirements of the Act and is in compliance with the FCC's orders in terms of providing CLECs with "at least equivalent electronic access" to its OSS functions that it provides "to itself, its customers, or other carriers." SWBT has also gone even further to provide CLECs with choices of both industry standardized interfaces and negotiated interim interfaces for access to its OSS functions that it did not provide to itself, its customers, or other carriers prior to the Act.

60. SWBT has designed its electronic interfaces and OSS functions to be scaleable in order to quickly and effectively add capacity as volumes warrant. SWBT has no reason to believe that it will not be able to handle large volumes of orders or transactions that can reasonably be anticipated from the CLECs.

ATTACHMENT A

GENERIC TEXT AND FLOW DIAGRAMS

SWBT ELECTRONIC INTERFACES AVAILABLE TO CLECS

ACCESS TO SOUTHWESTERN BELL OPERATIONS SUPPORT SYSTEMS FUNCTIONS

SWBT OPERATIONS SUPPORT INTERFACES

- SWBT IS MAKING AVAILABLE MULTIPLE ELECTRONIC INTERFACE CHOICES TO CLECs FOR ACCESS TO SWBT'S OPERATIONS SUPPORT SYSTEMS FUNCTIONS

- SEVERAL INTERFACES ARE AVAILABLE TODAY

- ADDITIONAL ELECTRONIC INTERFACE FUNCTIONS WILL BE AVAILABLE AS NEGOTIATED

PRE - ORDERING

- ELECTRONIC INTERFACES ARE AVAILABLE TO CLECs FOR BOTH **RESALE AND UNBUNDLED NETWORK ELEMENTS** TODAY
- PRE - ORDERING FUNCTIONS INCLUDE:
  - » ADDRESS VERIFICATION
  - » TELEPHONE NUMBER ASSIGNMENT
  - » SERVICE / FEATURE AVAILABILITY
  - » DUE DATE AVAILABILITY (RESALE)
  - » CUSTOMER SERVICE RECORD INFORMATION
  - » DISPATCH REQUIREMENTS
  - » CHANNEL FACILITY ASSIGNMENT (CFA) AND NETWORK CHANNEL / INTERFACE (NC/NCI) VERIFICATION (UNBUNDLED ELEMENTS)

ORDERING AND PROVISIONING

● RESALE

INTERFACE	AVAILABLE
● A FRONT END ELECTRONIC INTERFACE WILL BE AVAILABLE TO CLECs FOR CONVERSION OF RESIDENTIAL AND MOST BUSINESS ORDER REQUESTS (UP TO 30 LINES). SAME FRONT END SYSTEM SWBT USES FOR ITS RETAIL CUSTOMERS	NOW
● AS THE FRONT END SYSTEM IS ENHANCED TO SUPPORT SWBT BUSINESS RETAIL COMPLEX SERVICES, SWBT WILL MAKE THOSE CAPABILITIES AVAILABLE TO THE CLECs	AS NEGOTIATED

ORDERING AND PROVISIONING

• RESALE

INTERFACE	AVAILABLE
• IN THE INTERIM, COMPLEX REQUESTS WOULD BE ENTERED INTO SWBT'S SERVICE ORDER SYSTEM DIRECTLY BY SWBT PERSONNEL IN THE SAME TIME FRAME AND MANNER AS SWBT ENTERS ITS OWN COMPLEX BUSINESS RETAIL ORDERS. UPON REQUEST, SWBT WILL MAKE ITS SERVICE ORDER SYSTEM AVAILABLE TO CLECs	NOW
• AN ELECTRONIC INTERFACE IS AVAILABLE TO CLECs FOR CHECKING THE STATUS OF SERVICE ORDERS	NOW
• FOR CLECs WHO PREFER AN ELECTRONIC DATA INTERCHANGE (EDI) INTERFACE, SWBT IS MAKING EDI AVAILABLE FOR CONVERSION, NEW CONNECTS, DISCONNECT AND SUSPEND ORDER REQUESTS	NOW

ORDERING AND PROVISIONING

• RESALE

INTERFACE	AVAILABLE
• NATIONAL REQUIREMENTS FOR AN EDI INTERFACE CAPABILITY FOR DIRECTORY LISTINGS, CHANGE OF SERVICE, PARTIAL MIGRATIONS, AND COMPLEX CONVERSIONS ARE BEING ESTABLISHED. SCHEDULES TO BEGIN TESTING THESE FUNCTIONS ARE BEING FORMULATED	AS NEGOTIATED
• ALTHOUGH NATIONAL STANDARDS HAVE YET TO BE CREATED, SWBT IS DEVELOPING AN EDI FORMATTED INTERFACE TO ENABLE CLECs TO ELECTRONICALLY TRANSMIT COMPLEX BUSINESS ORDER REQUESTS TO SWBT FOR PROCESSING.	AS NEGOTIATED

ORDERING AND PROVISIONING

- **UNBUNDLED NETWORK ELEMENTS (UNE)**
  - » ELECTRONIC ORDERING REQUIREMENTS HAVE YET TO BE FULLY COMPLETED BY ANY NATIONAL STANDARD BODY
  - » SWBT IS DEVELOPING AN EDI INTERFACE TO RECEIVE AND PROCESS CLEC REQUESTS FOR UNEs
  - » THE INITIAL EDI CAPABILITY WILL SUPPORT CLEC REQUESTS FOR THE FOLLOWING UNEs AS DEFINED BY THE ORDERING AND BILLING FORUM (OBF) AND EDI COMMITTEE AS OF AUGUST 1996:
    - UNBUNDLED LOOPS
    - INTERIM NUMBER PORTABILITY
    - UNBUNDLED SWITCH PORTS
  - » IN ADDITION, THE INITIAL EDI CAPABILITY WILL ALSO SUPPORT OTHER UNEs AS ORDERED / NEGOTIATED ALREADY

ORDERING AND PROVISIONING

UNBUNDLED NETWORK ELEMENTS

SWBT WILL MAKE AVAILABLE TO CLECs THE FOLLOWING CAPABILITIES FOR UNBUNDLED NETWORK ELEMENTS:

INTERFACE	AVAILABLE
• PROCESS EDI FORMATTED FILES ELECTRONICALLY BASED ON AFOREMENTIONED AUGUST 1996 OBF DEFINITIONS	AS NEGOTIATED
• AN ELECTRONIC APPLICATION IS BEING DEVELOPED FOR CLECs THAT DO NOT HAVE EDI GENERATION CAPABILITIES. THIS INTERFACE WILL ENABLE CLECs TO CREATE AND SEND ORDER REQUESTS TO SWBT ELECTRONICALLY.	AS NEGOTIATED
• AN ELECTRONIC INTERFACE IS AVAILABLE TO CLECs FOR CHECKING THE STATUS OF SERVICE ORDERS	NOW

MAINTENANCE / REPAIR

- A CHOICE OF TWO ELECTRONIC INTERFACES ARE **AVAILABLE TODAY** FOR CLECs TO SUBMIT AND CHECK THE STATUS OF TROUBLE REPORTS FOR EITHER **RESALE OR UNBUNDLED NETWORK ELEMENTS:**
  - CLECs CAN ACCESS ONE INTERFACE VIA DIAL-UP OR PRIVATE LINE
    - » INTERFACE PROVIDES THE CAPABILITY TO INITIATE A MECHANIZED LOOP TEST FOR RESOLD POTS.
    - » INTERFACE PROVIDES MAINTENANCE HISTORY CAPABILITY FOR RESOLD POTS
  - THE OTHER ELECTRONIC INTERFACE IS A NATIONAL STANDARDIZED ELECTRONIC BONDING INTERFACE UTILIZED TODAY BY IXCs

BILLING

- ELECTRONIC INTERFACE AVAILABLE TODAY FOR **RESALE** CLECs TO RECEIVE BILLING INFORMATION VIA EDI FORMAT

- ELECTRONIC BILL FORMAT FOR **UNBUNDLED NETWORK ELEMENTS** IS AVAILABLE TODAY THROUGH SWBT CARRIER ACCESS BILLING SYSTEM (CABS) AS NEGOTIATED

BILLING

- ELECTRONIC INTERFACE IS AVAILABLE TODAY TO CLECs FOR VIEWING BILLING INFORMATION OF **RESALE OR UNBUNDLED NETWORK ELEMENTS**

- ELECTRONIC DAILY FEED FOR USAGE / TOLL BILLABLE RECORDS IS AVAILABLE TODAY TO CLECs VIA NATIONAL STANDARD EXCHANGE MESSAGE RECORD (EMR) FORMAT

SWBT OPERATIONS SUPPORT INTERFACES

- SUMMARY
  - » SWBT HAS PROVIDED CLECs THE CAPABILITY TO ACCESS ITS OPERATIONAL SUPPORT SYSTEM FUNCTIONS IN A MANNER THAT WILL MEET AND OFTEN EXCEED THE NEEDS OF CLECs
  - » SWBT WILL PROVIDE SUBSTANTIALLY THE SAME FUNCTIONALITY TO CLECs FOR PRE-ORDERING, ORDERING, PROVISIONING, MAINTENANCE/REPAIR AND BILLING THAT SWBT PROVIDES ITS RETAIL CUSTOMERS
  - » AS NATIONAL INDUSTRY INTERFACE STANDARDS ARE DEFINED AND APPROVED, SWBT WILL CONTINUE TO INCORPORATE THOSE STANDARDS INTO ITS OPERATIONS SUPPORT INTERFACES WITH CLECs

CLEC Pre-Ordering Options System Flows